

Date: Mon, 15 Nov 93 06:42:13 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #1350  
To: Info-Hams

Info-Hams Digest Mon, 15 Nov 93 Volume 93 : Issue 1350

## Today's Topics:

Advice needed on best band to use for across country chatting  
Amateur Class -Local)  
Elmers are dead, god help us HAMS!  
Exam Generator  
Index to the rec.radio.amateur.\* Supplemental Archives  
SAREX Keps & Update 10/28

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 14 Nov 93 20:47:33 GMT  
From: dziuxsolim.rutgers.edu!gandalf.rutgers.edu!troch@uunet.uu.net  
Subject: Advice needed on best band to use for across country chatting  
To: info-hams@ucsd.edu

Howdy,

I am in the process of studying for a Tech-No code ham license (Hope this doesn't turn some of you off from reading the rest of this message. :-))

I will be driving to Texas in a few months and would like very much to take a HT with me (actually that is irrelevant as I might purchase a mobile unit). I would really like to be able to stay in touch with folks back here in NJ. What band would you recommend to accomplish this, and is it possible on the freqs allowed with a tech-no code license?

Thanks,  
Rod

--  
--PGP 2.3 Public Key Available (finger me or ask for it)  
If you yell try : Rod Troch | Zeta Beta Tau  
internet : troch@gandalf.rutgers.edu |  
bitnet : troch@zodiac | happyHappy joyJoy  
Rutgers University - Faculty of Arts and Sciences / History Dept.  
- Microcomputer Analyst (Network Admin)

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Date: 14 Nov 93 15:01:00 GMT  
From: nntp.crl.com!boo!eabbs!sheri.ritchie@decwrl.dec.com  
Subject: Amateur Class -Local)  
To: info-hams@ucsd.edu

If anyone out there knows where an amateur radio class close to Hayward, CA is, let me know. I'd like to get in on the beginning of a class which is local, if possible.

Thanks, Sheri Ritchie @ Easy Access

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Date: 15 Nov 93 14:05:08 GMT  
From: news.crd.ge.com!crd.ge.com!mallick@uunet.uu.net  
Subject: Elmers are dead, god help us HAMS!  
To: info-hams@ucsd.edu

Unfortunately, a lot of the information new hams need to understand just what all those knobs are doing on the front of those old transceivers is just not around any more in any of the handbooks or introductory literature. When I was "tooling up" for my general class license, I remember studying "Understanding Amateur Radio" from the ARRL. A real fine text that helped me understand just what was going on inside the box. I'm not sure anything like that is available any more. All the new entrants can do is rely on the Elmers to help 'em out.

I wonder what ever happened to my copy of that book?

--  
John A. Mallick WA1HNL  
GE Corporate Research and Development  
Schenectady, NY 12301

E-mail: mallick@crd.ge.com  
Phone: (518)-387-7667 (W)  
FAX: (518)-387-6560 (W)

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Date: Mon, 15 Nov 1993 02:04:58 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!agate!  
library.ucla.edu!csulb.edu!csus.edu!netcom.com!msattler@network.ucsd.edu  
Subject: Exam Generator  
To: info-hams@ucsd.edu

Stephen Mosier (mosier@fagan.uncg.edu) wrote:

: I've lost my copy of an exam generator. Right now I'm in need of a General  
: Class exam generator to help someone study. Does anyone know where there is  
: an FTPable copy of the software?

world.std.com:/pub/hamradio/arrl/Server-files/pool-general-1.Z and  
pool-general-2.Z contain the questions. There is also (for Macs)  
a HyperCard stack in /pub/hamradio/mac/theory-and-morse as  
General\_Ham\_Test\_.hqx. Anyone got any pointers for DOS/Windows?

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Michael S. Sattler msattler@netcom.com +1 (415) 621-2903  
Digital Jungle Software Encrypt now; ask me how. (finger for PGP key)

All that is required for evil to triumph is  
for {wo}men of good will to do nothing.

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Date: 15 Nov 93 12:00:13 GMT  
From: nevada.edu!news.unomaha.edu!news@uunet.uu.net  
Subject: Index to the rec.radio.amateur.\* Supplemental Archives  
To: info-hams@ucsd.edu

Posted-By: auto-faq 2.4  
Archive-name: radio/ham-radio/archives

The following is a list of informational files for this newsgroup  
available via anonymous FTP from ftp.cs.buffalo.edu (currently at IP  
number 128.205.32.9) or the Australian mirror at grivel.une.edu.au  
(currently at IP number 129.180.4.7).

Questions to bowen@cs.buffalo.edu

1750m.band - misc info on the 1750m band  
222xvtr.zip - PostScript code for KH6CP no-tune 222-MHz transverter  
8085sys.zip - 8085 system software, from QEX 11/93 and 12/93  
alinco\_180t\_mod - Alinco 180T modification for a TNC connection  
ampr\_coordinators - coordinators for packet IP addresses

antenna\_refs - references for articles about antenna designs  
arrl-logo.ps - ARRL logo in PostScript format  
arrl\_bib - bibliographies from ARRL literature (ASCII format)  
arrl\_digital\_minutes - Minutes of the ARRL committee on digital comm.  
arrl\_fo\_jobs - descriptions of some ARRL Field Organization jobs  
arrl\_info\_service - announcement of the ARRLs trial information service  
bbs\_interface\_specs - specifications for message passing protocol  
cal\_pd\_freq - California police frequencies  
callbook.tar.Z - sources for the marvin callsign server v1.3  
canadian.Z - Canadian ham database in FCC format  
carpet.loop.2 - Antenna for apartments and small spaces  
clubcalls.Z - database of US ham clubs  
comb6.zip - HF Propagation Predication program  
docket\_91-36 - information regarding the proposed scanner regs  
dxcc-k2di - ARRL DXCC country list  
dx\_w2iol.dat - data for all country prefix, position, etc  
dx\_w2iol.doc - documentation for the above database  
element\_credit - rules about VE credit for earliers exams  
elmers\_admin - information about the elmers list (see below)  
elmers\_list - list of elmers on the network  
exam\_ops - info on exams and exam opportunities  
faq\_callsign - frequently asked questions about the callsign server  
faq\_ham\_1 - frequently asked questions about ham radio (pts 1)  
faq\_ham\_2 - frequently asked questions about ham radio (pts 2)  
faq\_ham\_3 - frequently asked questions about ham radio (pts 3)  
faq\_packet - frequently asked questions about packet radio  
faq\_shortwave - frequently asked questions about shortwave  
fft.com - EGA/VGA DOS command for spectral display (QST 1/92)  
ffth.com - Hercules DOS command for spectral display (QST 1/92)  
field\_day\_92 - field day rules for 1992  
florida\_antenna - Florida State antenna law info  
guide2newsgroups - description of USENET newsgroups dedicated to radio  
ham\_sat\_sum - summary of information needed to get on satellite  
hams\_on\_usenet - list of ham operators and e-mail addresses on the net  
hamstacks - information about the question pool stacks  
handicap\_waiver - info on obtaining a handicapped test waiver  
hf\_rigs - QST reviews of available HF rigs  
ht\_info - general information about commercial hand helds  
icom\_ic\_w21at\_mods - increases the number of bands on an Icom IC W21AT  
intro\_to\_sw1 - info for aspiring short wave listeners  
intro\_to\_scanners - info for aspiring scanner listeners  
jlem.zip - Program, w/source, for 2kx8 ROM emulator (QEX 1/93)  
j-poles - description of j-pole antenna made from twin-lead  
lead\_acid\_batteries - essay on lead-acid batteries  
license\_plates - guide to ham calls on license plates  
logos - PostScript logos for various ham organizations  
mail\_order - a database of electronic mail order shops  
manufacturers - names and addresses of ham gear manufacturers

mav11.ps - postscript image of MAV-11 amplifier PCB (QEX 9/93)  
mods - directory containing radio modifications  
motorola\_ge\_service\_man - how to get service manuals for Motorola and GE rigs  
nasa\_select - places where you can hear NASA SELECT broadcasts  
new\_packeteers - helpful essays for new packeteers  
newcomers - tips and hints for those new to amateur radio  
nprm\_93\_85\_text - text of docket 93-85 (message forwarding systems)  
packet\_clubs - organizations you can get more packet info from  
packet\_gateways - list of gateways from packet to Internet  
packet\_header\_standard - description of BBS message header standards  
packet\_misc - miscellaneous packet info  
packet\_software - list of packet software versions  
phone\_bbs\_list - phone BBSs for ham related issues/software  
pio\_handbook - ARRL Public Information Officer's Handbook  
pr\_docket\_92-136 - text of FCC PR Docket 92-136  
qex1193.ps - Postscript image of 13cm preamp board, 11/93 QEX "RF"  
qsl\_bureau1 - information about the ARRL QSL bureau  
qsl\_bureau2 - "what should I do if" list for the QSL bureau  
qst\_prodrev - index of ARRL product reviews in QST  
quest\_pool\_novice - novice question pool - good after 7/1/93  
quest\_pool\_technician - technician question pool - good after 7/1/93  
quest\_pool\_general - general question pool - good before 6/30/94  
quest\_pool\_advanced - advanced question pool - good before 6/30/95  
quest\_pool\_extra - extra question pool - good before 6/30/96  
repeater\_map\_proj - description of Electronic Repeater Mapping Project  
rfi\_tips - good posting about RFI  
sol\_geo\_data - description of daily solar geophysical broadcasts  
sol\_terra\_terms - glossary of solar-terrestrial terms  
sstv\_wefax\_info - general help for SSTV and WEFAX users  
tasm.zip - table-driven assembler for weavrdsp.zip file  
usenet\_purchases - tips on buying and selling via USENET  
weavrdsp.zip - src to "Weaver Method Modulator Using DSP" (QEX 9/93)

For readers of this newsgroup both new and experienced, these files are a de-facto "Required Reading List" to provide definitive answers and pointers to other sources for questions that come up in this forum.

This is also your archive, so any additional articles, guides, or small PostScript graphics that you feel would enhance this collection are most welcome. Submit to Devon via his E-mail address above.

Thanks go to Devon Bowen, KA2NRC, for providing diskspace and maintaining these valuable archives, as well as all the authors who wrote and submitted the information contained in them.

Additional archives out there that have /pub/ham-radio directories are encouraged to "mirror" these files to provide redundant storage for these documents. Some of these sites (which may or may not mirror

ftp.cs.buffalo.edu) include:

ucsd.edu	128.54.16.1	/hamradio
nic.funet.fi	128.214.6.100	/pub/ham /pub/dx
csseq.cs.tamu.edu	128.194.2.20	/ham-radio
suntan.tandem.com	130.252.10.8	/hamradio
col.hp.com	15.255.240.16	/packet
talos.cs.buffalo.edu	128.205.32.9	/pub/ham-radio
bubba.business.uwo.ca	129.100.22.42	/hamster/ham /hamster/tcpip /hamster/mods /hamster/view
vax.cs.pitt.edu	130.49.2.1	/pub/arrl8 /pub/ka9q /pub/ncpa /pub/tnc2
brolga.cc.uq.oz.au	130.102.128.5	/pub/ka9q
tomcat.gsfc.nasa.gov	128.183.10.100	/public
helios.tn.cornell.edu	128.84.241.2	/pub
wuarchive.wustl.edu	128.252.135.4	/mirrors/msdos/hamradio /mirrors/msdos/packet /mirrors/msdos/ka9q-tcpip /mirrors/cpm/hamradio /mirrors/cpm/packet /mirrors/misc/hamradio /mirrors/misc/packet /mirrors/misc/ka9q-tcpip
gatekeeper.dec.com	16.1.0.2	/pub/net/ka9q
sun.soe.clarkson.edu	128.153.12.3	/pub/ka9q
sics.se	192.16.123.90	/archive/packet /pub/packet-incoming
sabrina.dei.unipd.it	147.162.2.106	/pub/hamradio
uhunix2.uhcc.Hawaii.Edu	128.171.44.7	/incoming/ham-radio
caticsuf.cati.csufresno.edu	129.8.100.15	/pub/ham-radio
ftp.waseda.ac.jp	133.9.1.32	/pub/toumon/ham-radio
garfield.catt.ncsu.edu	152.1.43.23	/pub/hamradio
plan9.njit.edu	128.235.1.10	/pub/hamradio
sunee.uwaterloo.ca	129.97.128.196	/pub/radio
grivel.une.edu.au	129.180.4.7	/pub/ham-radio
uxc.cso.uiuc.edu	128.174.5.50	/pub/ham-radio
iraun1.ira.uka.de	129.13.10.90	/pub/ham-radio
nic.switch.ch	130.59.1.40	/software/hamradio /software/mac/ham-radio
iesd.auc.dk	130.225.48.4	/ham-radio
akutaktak.andrew.cmu.edu	128.2.35.1	/aw0g (softkiss-mac)
???????????	129.69.162.1	/pub (login as ftp pkt cluster,usa callbook)

gandalf.umcs.maine.edu	130.111.112.21	/pub/ham-radio # ls -l NO !)
rtfm.mit.edu	18.70.0.209	/pub/usenet/news.answers/radio
tamu.edu	128.194.15.32	/pc-sig
ftp.geo.brown.edu	128.148.116.19	/pub/hamradio
ns.risc.net	155.212.2.2	/ham-radio
world.std.com	192.74.137.5	/pub/hamradio

Questions about FTP mirroring and access to appropriate software should be directed to me, or do an Archie search on the keyword "mirror."

For those without FTP access (and only those without FTP access, please), there is an FTP mail server at [ftpmail@decwrl.dec.com](mailto:ftpmail@decwrl.dec.com) (IP 16.1.0.1). Send the word "HELP" to this address for more information.

Additional documents on Usenet and other newsgroups may be obtained from [rtfm.mit.edu](mailto:rtfm.mit.edu) (IP 18.70.0.209) via anonymous FTP or via mail server (send the word "HELP" to [mail-server@rtfm.mit.edu](mailto:mail-server@rtfm.mit.edu)).

The American Radio Relay League has recently made available a mail-server to distribute many of their informational documents in electronic form. Send E-mail to [info@arrl.org](mailto:info@arrl.org) with "HELP" in the message body for more information.

Yet another mail-server has been made available by Steve Harding, KA6ETB. Send E-mail to [ham-server@grafex.Cupertino.CA.US](mailto:ham-server@grafex.Cupertino.CA.US) with "HELP" in the message body for more information.

73, Paul W. Schleck, KD3FU

[pschleck@unomaha.edu](mailto:pschleck@unomaha.edu)

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

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Date: 15 Nov 93 09:32:15 GMT  
From: [news-mail-gateway@ucsd.edu](mailto:news-mail-gateway@ucsd.edu)  
Subject: SAREX Keps & Update 10/28  
To: [info-hams@ucsd.edu](mailto:info-hams@ucsd.edu)

R:931115/0819Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:65142 Z:77478  
R:931114/0624Z @:K5DI.NM.USA.NA [Las Cruces] #:7500 318mn 43s29256\_W70EK  
R:931114/0635Z @:KC7CG.AZ.USA.NA #:23309  
R:931113/1948Z @:W7JHX.AZ.USA.NA [Tucson] #:667 Z:85710 FBB5.15  
R:931111/0639Z @:NOIFE.#NCMO.MO.USA.NA [Moberly, Mo] #:54193 Z:65270 FBB5.15  
R:931107/2151Z @:KJ4LQ.#TIDE.VA.USA Chesapeake #:51383 Z:23320  
R:931107/0732Z @:N7IJI.#CLT1.NC.USA.NA Z:28209 #:76154 \$:29256\_W70EK  
R:931105/1624Z 60177@KT0H.#NECO.CO.USA [DATA HUB CO]

R931105/1608Z @:W0RA.#SECO.CO.USA.NA [YODER] FBB5.14d #:83466

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29256 ; Thu, 04 Nov 93 03:46:32 GMT  
Date: Thu, 04 Nov 93 03:44:57 UTC  
Message-Id: <29255\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29255 ; Thu, 04 Nov 93 02:45:47 GMT  
Date: Thu, 04 Nov 93 02:44:45 UTC  
Message-Id: <29254\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29254 ; Thu, 04 Nov 93 01:45:29 GMT  
Date: Thu, 04 Nov 93 01:44:47 UTC  
Message-Id: <29253\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29253 ; Thu, 04 Nov 00:46:29 GMT  
Date: Thu, 04 Nov 93 00:45:06 UTC  
Message-Id: <2949\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29249 ; Thu, 04 Nov 93 00:15:42 GMT  
Date: Thu, 04 Nov 93 00:15:11 UTC  
Message-Id: <29228\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org

To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29228 ; Wed, 03 Nov 93 22:47:23 GMT  
Date: Wed, 03 Nov 93 22:46:25 UTC  
Message-Id: <29207\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29207 ; Wed, 03 Nov 93 21:45:05 GMT  
Date: Wed, 03 Nov 93 21:44:35 UTC  
Message-Id: <29164\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29164 ; Wed, 03 Nov 93 20:56:01 GMT  
Date: Wed, 03 Nov 93 20:55:40 UTC  
Message-Id: <29150\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29150 ; Wed, 03 Nov 93 18:45:47 GMT  
Date: Wed, 03 Nov 93 18:45:40 UTC  
Message-Id: <29148\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29148 ; Wed, 03 Nov 93 18:03:46 GMT  
Date: Wed, 03 Nov 93 18:03:22 UT

Message-Id: <29147\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29147 ; Wed, 03 Nov 93 17:12:03 GMT  
Date: Wed, 03 Nov 93 17:11:44 UTC  
Message-Id: <29136\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29136 ; Wed, 03 Nov 93 15:44:49 GMT  
Date: Wed, 03 Nov 93 15:44:44 UTC  
Message-Id: <29134\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29134 ; Wed, 03 Nov 93 14:45:08 GMT  
Date: Wed, 03 Nov 93 14:44:47 UTC  
Message-Id: <29132\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>  
id 29132 ; Wed, 03 Nov 93 13:44:32 GMT  
Date: Wed, 03 Nov 93 13:44:45 UTC  
Message-Id: <29131\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29131 ; Wed, 03 Nov 93 12:44:39 GMT  
Date: Wed, 03 Nov 93 12:44:44 UTC  
Message-Id: <29126\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29126 ; Wed, 03 Nov 93 11:44:24 GMT  
Date: Wed, 03 Nov 93 11:44:43 UTC  
Message-Id: <29125\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29125 ; Wed, 03 Nov 93 10:44:31 GMT  
Date: Wed, 03 Nov 93 10:44:47 UTC  
Message-Id: <2917\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29117 ; Wed, 03 Nov 93 09:43:27 GMT  
Date: Wed, 03 Nov 93 09:43:46 UTC  
Message-Id: <29091\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29091 ; Wed, 03 Nov 93 08:56:04 GMT  
Date: Wed, 03 Nov 93 08:55:59 UTC  
Message-Id: <29080\_w7oek@w7oek.bbs>

From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29080 ; Wed, 03 Nov 93 07:45:09 GMT  
Date: Wed, 03 Nov 93 07:45:11 UTC  
Message-Id: <29079\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29079 ; Wed, 03 Nov 93 07:03:53 GMT  
Date: Wed, 03 Nov 93 07:03:31 UTC  
Message-Id: <29066\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29066 ; Wed, 03 Nov 93 05:43:31 GMT  
Date: Wed, 03 Nov 93 05:44:04 UTC  
Message-Id: <29062\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator  
<ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29062 ; Wed, 03 Nov 93 02:45:25 GMT  
Date: Wed, 03 Nov 93 02:46:01 UTC  
Message-Id: <29050\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org

To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29050 ; Wed, 03 Nov 93 02:01:26 GMT  
Date: Wed, 03 Nov 93 02:01:50 UTC  
Message-Id: <29047\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29047 ; Wed, 03 Nov 93 01:09:32 GMT  
Date: Wed, 03 Nov 93 01:09:40 UTC  
Message-Id: <29041\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFH%W70EK@WD4ECK.AMPR.ORG>

id 29041 ; Tue, 02 Nov 93 21:42:27 GMT  
Date: Tue, 02 Nov 93 21:42:59 UTC  
Message-Id: <28985\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFH%W70EK@WD4ECK.AMPR.ORG>

id 28985 ; Tue, 02 Nov 93 20:47:06 GMT  
Date: Tue, 02 Nov 93 20:47:48 UTC  
Message-Id: <28973\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org

To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28973 ; Tue, 02 Nov 93 19:58:01 GMT  
Date: Tue, 02 Nov 93 19:58:49 UTC  
Message-Id: <28968\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28968 ; Tue, 02 Nov 93 18:43:20 GMT  
Date: Tue, 02 Nov 93 18:44:09 UTC  
Message-Id: <28942\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28942 ; Tue, 02 Nov 93 17:43:53 GMT  
Date: Tue, 02 Nov 93 17:44:47 UTC  
Message-Id: <28937\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28937 ; Tue, 02 Nov 93 15:43:49 GMT  
Date: Tue, 02 Nov 93 15:44:50 UTC  
Message-Id: <28936\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org

To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28936 ; Tue, 02 Nov 93 14:43:54 GMT  
Date: Tue, 02 Nov 93 14:44:51 UTC  
Message-Id: <28935\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28935 ; Tue, 02 Nov 93 13:43:53 GMT  
Date: Tue, 02 Nov 93 13:44:50 UTC  
Message-Id: <28933\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28933 ; Tue, 02 Nov 93 12:42:37 GMT  
Date: Tue, 02 Nov 93 12:43:53 UTC  
Message-Id: <28932\_w7oek@w7oek.bbs>  
From: abfhb%w7oek@wd4eck.ampr.org  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator <ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 28932 ; Tue, 02 Nov 93 12:09:45 GMT  
X-Forwarded-To: W70EK

Date: 28 Oct 93 19:00:00 UTC

Message-Id: <931028050312@w7oek.bbs>  
From: abfhb@wa8ure.#swmi.mi.usa.na  
To: ans@amsat.org  
Subject: SAREX Keps & Update 10/28  
X-BBS-Msg-Type: B

SB SAREX @ AMSAT \$STS-58.025  
SAREX Keps & Update: 10/28

Thursday 10/28/93 @ 08:00 UTC

The last school group contact was completed yesterday. The Portsmouth HS in Portsmouth, New Hampshire had a telebridge contact using stations in California (Ralph Warner, N6MNN) and Texas (Bob Douglas, W5GEL). The students asked 5 questions during this bridge contact.

Hams across the U.S. and around the world continue to work the Shuttle Columbia on both voice and packet. Moreover, the completion of school group contacts has cleared several school backup passes for possible general QSO opportunities. While the SAREX Working Group cannot fully guarantee availability, there is a high probability that the STS-58 crew will be ready to take general calls over the continental U.S. on these passes. Two of these "scheduled" passes remain. These include orbit 178 at MET 11 days 1 hour 42 minutes (10/29 at 16:35 UTC) and orbit 192 at MET 11 days 22 hours and 29 minutes (10/30 at 13:22 UTC). Please note that the astronauts operated voice during yesterday's "scheduled" pass which occurred on 10/27 at 14:59 UTC (Orbit 145). Also note that hams on

the ground heard or worked the Shuttle Columbia crew on several other orbits yesterday.

Element set GSFC-031, generated by Ron Parise, WA4SIR, is the official SAREX set for today. Please note that there is only a six second difference between element set GSFC-025 (released two days ago) and element set GSFC-031.

STS-58  
1 22869U 93065A 93300.17699070 0.00133671 99048-5 24183-3 0 318  
2 22869 39.0252 71.9896 0012817 34.2105 325.9529 16.00500857 1383

Satellite: STS-58  
Catalog number: 22869

Epoch time:	93300.17699070	(27 OCT 93 04:14:51.** UTC)
Element set:	GSFC-031	
Inclination:	39.0252 deg	
RA of node:	71.9896 deg	Space Shuttle Flight STS-58
Eccentricity:	0.0012817	Keplerian Elements
Arg of perigee:	34.2105 deg	
Mean anomaly:	325.9529 deg	
Mean motion:	16.00500857 rev/day	Semi-major Axis: 6651.1630 Km
Decay rate:	0.13E-02 rev/day*2	Apogee Alt: 281.30 Km
Epoch rev:	138	Perigee Alt: 264.25 Km

NOTE - This element set is based on NORAD element set # 031.  
The spacecraft has been propagated to the next ascending  
node, and the orbit number has been adjusted to bring it  
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

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End of Info-Hams Digest V93 #1350  
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